

MAJOR MAMMALS OF AFRICA

➤ ORDER: PROBOSCIDEA

General taxonomic and other characters of the Order Proboscidea

The Order Proboscidea is comprised of one family the **ELEPHANTIDAE**. It represents the largest land or terrestrial mammal in the world. Features of the order are unmistakable. A very large body which is almost as long as its length (minus the trunk or proboscis) weight up to 7000kgs and height of up to 4 meters.

A distinct flexible proboscis (from which the name of the order is derived) which is in fact the result of the elongation of the upper lip and the nose. Nostrils are found at the tip of the proboscis. Proboscis performs many delicate functions such as foraging, drinking water, mud and dust bathing, pulling down trees, catching enemies, etc. Upper incisors elongated to form tusks or ivory. Long and stump – like feet. The inside of the feet, near the digits, are filled or provided with elastic pads or tissue (like shock absorbers in a car or motor cycle) which enable to support the enormous weight of the animal. Thick skin with scanty hairs, tail long with a tuft of coarse strands of hairs. Eyes fairly small. For the size of the animals.

Enormous ears shaped like fans.

➤ FAMILY ELEPHANTIDAE: GENERAL TAXONOMIC AND OTHER CHARACTERS OF FAMILY ELEPHANTIDAE

As mentioned above, the order Proboscidea is represented by the only existing family – Elephantidae. The General Taxonomic and other Characters described under the order are equally applicable to the family. The Family Elephantidae is comprised of two genera:

- i. Loxodonta
- ii. Elephas

The genus Loxodonta refers to the African Elephant, whereas the genus Elephas belongs to the Asiatic Elephant. Major differences between the two genera:

TAXONOMIC CHARACTER	LOXODONTA	ELEPHAS
Body size	Larger	Smaller
Ears	Larger	Smaller
Black	With a slight depression (concave)	With a slight hump (convex)
Lip of Proboscis	With two finger-like processes	With one finger-like process

Forehead more convex is with less convex is with
Pronounced hump pronounced hump

➤ Only the genus **Loxodonta** will be discussed in full in class.

Genus: Loxodonta

General Taxonomic and other characters of the Genus LOXODONTA

The major characters of the genus have already been described under the heading family. In summary, the genus contains the larger of the two existing types of elephants. Tusks are larger and curved upwards. The back has a slight depression, teeth are less complex. But more conspicuously, the animal representative of this genus has got very large and fan-shaped ears.

Species: *Loxodonta africana* (Blumebach)

➤ **Taxonomic Characters:**

SH:	3 – 4 meters	(9 – 13 feet)
HB:	5.5 – 7.6 meters	(18 – 25 feet)
T:	1 – 1.2 meters	(3 – 4 feet)
TL:	6.5-8.8 meters	(21 – 29 feet)
HL:	None	(Hoon Length)
WT:	4000 – 7000 kg	

The largest elephant ever recorded measured 13 feet 2 inches and its total length was 33 feet 2 inches. The full mount of this elephant is exhibited at the Smithsonian institution museum which is the U.S National Museum.

DF: I: 1/0, C: 0/0, PM: 3/3, m: 3/3 = 26

The single pair of upper incisors grew throughout life in form tusks. The tusks are very variable in weight and length. The heaviest tusk so far recorded weighed 109 kg and the longest tusk so far recorded increased 11 feet 5 inches. (3.5 meter).

The premolars are lost early in life and have no functional importance. A single molar on each side of the lower and upper jaws is functional at any given time and is replaced from the rear, as it wears away by the next posterior tooth. A set of six molars are functional during the life span of the animal.

➤ **Body structure:** (General Appearance, markings etc) description of the body structure of the animal has been adequately covered under order, family and genus sub-titles.

➤ **Geographical Distribution:**

The African elephant is found in Africa only mostly south of Sahara and in suitable habitats. Small populations also occur in Mauritania.

➤ **Habitat preference:**

In terms of habitat – preference the animal is fairly versatile. Found in high forest, including mountain forests up to 9,000 feet, high, Guinea savannah and Sahel savannah.

➤ **Food habits**

- Entirely vegetation
- Both a grazer and browser

But the animal can be completely a grazer or browser, depending on the availability of food in the resident habitats. Elephants eat huge quantities of forage materials up to 400 – 600 in a day (225kg).

➤ **REPRODUCTION**

Elephants normally give birth to one young, that is they have a litter size of 1 young. Twins have been recorded, but they are very rare.

In fact I have read of one case of twins being born – many are National Park in Tanzania.

- Gestation period of around 22 months.
- At birth, young weighs around 1210 Ibs and stands about 1m feet, Elephants mature around 12 – 15 years.
- Live span about 50 years – although there are reports of elephants living up to 80 years, but 69 years is the most accurate longevity record known. (There are other authorities who quote longer of up to 120 years most doubtful)

➤ **BEHAVIOUR**

- Elephants are social animals living in herds of 10 to 50 animals. Larger groups are also not uncommon.
- A typical breeding herd of elephants is normally led by an old female. There is usually a master bull, several cows and calves of various ages and even younger bulls too.
- Old bulls or even young mature bulls tend to be solitary. Living in their own “Old” or “Young” bulls” herds – numbering up to 12 animals. But very old bulls are completely solitary. Two reasons account for the solitary bulls – whether young or old – “young bulls herds” – chased away from breeding herd by master bull. “old bull’s herds” – lost instinct of herd association Elephants are active both during the day and night – they are both diurnal and nocturnal – feeding being the major activity.
- Elephants like to take both mud and dust baths.
- Like to lick salt from salt – licks.
- Drink daily – and will travel long distances in search of water.

If you are lost in the bush and you have no water – if you see a herd of elephants. Follow them – they will take you to water source – but be careful to check the wind direction – (demonstrate).

- Elephants use tusk to dig water in dry river beds – normally use their right tusk – that is why one always finds that the right tusk is normally worn down. Exceptions are a few “left tuskers”
- Despite their large size, elephants can run as fast as 40 – 50 km/ph at short distances.
- Also, despite their / size, elephants rarely attack people unless when they are wounded or accompanied by young or when suddenly cornered or surprised – a characteristic of most animals – including domestic chickens.

- In areas where they are well protected, elephants are not afraid of humans, and provided one remains in a vehicle, one can approach an elephant every closely. Reverse is true where elephants are heavily hunted / poached when disturbed, elephants can give out a very loud, striking and frightening sound. The same sound is made when attacking an enemy. When this occurs, the trunk or Proboscis is curved inwards and upwards between the tusks and the ears are completely flattened on the body.

(When an elephant “attacks” or you with its trunk directed forwards and the ears flapping, it is a mock charge).

Because elephants feeding is wasteful they can deforest or change the vegetation of an era in no time.